

Background on Aquifer Exemption Under the Safe Drinking Water Act and the Underground Injection Control Program

The Safe Drinking Water Act (SDWA) and the Underground Injection Control (UIC) program are designed to prevent endangerment of underground sources of drinking water (USDW) (***SDWA 1421(b)***).

Under SDWA, the injection into a USDW of fluids that may harm human health, or cause a violation of a primary drinking water regulation is prohibited. EPA defines a USDW as any aquifer that contains water in producible quantities with a concentration of 10,000 mg/l or less of total dissolved solids, and which is not an exempted aquifer.

EPA established aquifer exemptions by regulation in 1980 after determining that certain types of energy production—namely mineral, oil, and geothermal—would be limited without them. Over 90% of the approximately 5,000 aquifer exemptions are related to oil and gas development. Most are located in western states.

An aquifer exemption removes the protection afforded by SDWA and allows injection that would otherwise be prohibited. Certain criteria must be met before an aquifer is exempted, however.

An aquifer exemption is a revision to a UIC program, and EPA grants final approval for aquifer exemptions whether a state has primacy over the UIC program or EPA directly implements the UIC program in a state.

Only the EPA Administrator or a Regional Administrator can grant final approval for aquifer exemptions. Final approvals require state primacy programs to identify proposed exempted area(s), characteristics of the aquifer. In states where EPA directly implements the UIC program, EPA works directly with applicants to identify the proposed exempted area.

To grant an exemption, EPA must determine that the aquifer proposed for exemption is not currently used as a source of drinking water or is not a future source of drinking water. This determination must follow the criteria at 40 CFR 146.4. The majority of aquifer exemption requests are acted on by EPA within 45 days of receiving a complete application package. Mining or injection activities that would require fluids to be injected into a USDW may begin after EPA approves an aquifer exemption.

The public has the right to comment on all proposed aquifer exemptions. Primacy state(s) or EPA must provide notice and opportunity for public hearing for aquifer exemptions.